WHAT IS CLAIMED IS:

1. A method for the treatment of a DNA viral infection in a human or animal comprising administering to a human or animal in need of such treatment, a pharmacologically acceptable therapeutically effective amount of exogenous LTB_4 agent.

2. A method according to claim 1, wherein said viral infection is of a human or animal virus.

3. A method according to claim 2, wherein said DNA viruses are selected from the group consisting of parvoviridae, papovaviridae, adenoviridae, poxviridae and hepadnaviridae.

4. A method according to claim 1, wherein said agent is leukotriene B_4[5S,12R-dihydroxy-6,8,10,14(Z,E,E,Z)-eicosatetraenoic acid].

5. A method according to claim 1, wherein said agent is administered in association with one or several different antiviral agents.

6. A method according to claim 5, wherein said different antiviral agent is selected from the group consisting of interferon-α, -β, -γ, tumor necrosis factor α, ganciclovir, acyclovir, vidarabine, idoxuridine, famciclovir, 3TC, crixivan, nevarepine prostaglandins, prostaglandin analogs and AZT.

7. A method according to claim 1 for the treatment of cancer induced by oncogene viruses.

8. A method according to claim 1, wherein said human or animal is an immunosuppressed patient or animal, or a patient treated with a drug known to enhance the occurrence of viral infections.

9. A method according to claim 8, wherein said drug is selected from the group consisting of azathioprine, corticosteroids, adriamycine, cyclophosphamide and methotrexate.

10. An antiviral pharmaceutical formulation comprising a pharmacologically acceptable, therapeutically effective amount of a LTB_4 agent, in accordance with a pharmaceutically acceptable carrier.

11. A formulation according to claim 10, wherein said agent is leukotriene B_4[5S,12R-dihydroxy-6,8,10,14 (Z,E,E,Z)-eicosatetraenoic acid].

12. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: LTB_4, 14,15-dihydro-LTB_4 ("LTB_3"), 17,18-dehydro-LTB_4 ("LTB_5"), 19-hydroxy-LTB_4, 20-hydroxy-LTB_4, and 5(S)hydroperoxy and 5-deoxy analogs thereof.

13. A method according to claim 12, wherein said LTB_4 agent is selected from the group consisting of:
5-keto, 5(R)-hydroxy and 5(R)-hydroperoxy analogs of said LTB_4 agent.

14. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: leukotriene A_4 ("LTA_4"), 14,15-dihydro-LTA_4 ("LTA_3"), and 17,18-dehydro-LTA_4 ("LTA_5").

15. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 14,15-dihydro-LTA_4 methyl ester and LTB_4 methyl ester.

16. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 12(R)-hydroxy-5,8,10,14(Z,Z,E,Z)-eicosatetraenoic acid ("12-HETE"), 5,6-dihydro-12-HETE, 14,15-dihydro-12-HETE, 17,18-dehydro-12-HETE and 12(R)-hydroperoxy analogs thereof.

17. A method according to claim 16, wherein said LTB_4 agent is selected from the group consisting of: 12-keto, 12(S)-hydroxy and 12(S)-hydroperoxy analogs of said LTB_4 agent.

18. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 5(S)-hydroxy-6,8,11,14(E,Z,Z,Z)-eicosatetraenoic acid ("5-HETE"), 14,15-dihydro-5-HETE, 17,18-dehydro-5-HETE, and 5(R)-hydroxy, 5-keto, 5(S)-hydroperoxy, 5(R)-hydroperoxy analogs thereof.

19. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 12-oxo-5,8,10(Z,Z,E)-dodecatrienoic acid, 15(S)-hydroxy-5,8,11,13(Z,Z,Z,E)-eicosatetraenoic acid ("15-HETE"), 5,6- dihydro-15-HETE, 17,18-dehydro-15-HETE and 15(R)-hydroxy, 15-keto, 15(S)-hydroperoxy, and 15(R)-hydroperoxy analogs thereof; 12(S)-hydroxy-5,8,10(Z,E,E)-heptadecatrienoic acid.

20. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of:

leukotrienes C_4, D_4 and E_4 and 14,15-dihydro or 17,18-dehydro analogs thereof; N-acyl or N-alkyl derivatives of leukotrienes C_4, D_4 and E_4, and 14,15-dihydro or 17,18-dehydro analogs thereof.

21. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 5,12-dihydroxy-6,8,10,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 5,6-dihydroxy-7,9,11,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 5,15-dihydroxy-6,8,11,13-eicosatetraenoic acid, isomers thereof and 17,18-dehydro analogs thereof; 8-hydroxy-11(12)-epoxy-5,9,14-eicosatrienoic acid, hepoxilin A_3, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 10-hydroxy-11(12)-epoxy-5,8,14-eicosatrienoic acid, hepoxilin B_3, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 8,11,12-trihydroxy-5,9,14-eicosatrienoic acid, trioxilin A_3, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 10,11,12-trihydroxy-5,8,14-eicosatrienoic acid, trioxilin B_3, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof.

22. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of:
5(S),15(S)-dihydroxy-6,8,11,13(E,Z,Z,E)-eicosatetraenoic acid.

23. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of:

11(12)-epoxy-5,7,9,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 11,12-dihydroxy-5,7,9,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 8(9)-epoxy-5,10,12,14-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 8,9-dihydroxy-5,10,12,14-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 8,15-dihydroxy-5,9,11,13-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 14(15)-epoxy-5,8,10,12-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 14,15-dihydroxy-5,8,10,12-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof.

24. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of:
5-hydroxy-14(15)-epoxy-6,8,10,12-eicosatetraenoic acid, isomers thereof and 17,18-dehydro analogs thereof; 5,14,15-trihydroxy-6,8,10,12-eicosatetraenoic acid, lipoxin B_4, isomers thereof and 17,18-dehydro analogs thereof; 5,6,15-trihydroxy-7,9,11,13-eicosatetraenoic acid, lipoxin A_4, isomers thereof and 17,18-dehydro analogs thereof; 5(6)-epoxy-15-hydroxy-7,9,11,13-eicosatetraenoic acid, isomers thereof and 17,18-dehydro analogs thereof; 5-hydroxy-6,8,11,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 9-hydroxy-5,7,11,14-eicosatetraenoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 11-hydroxy-5,8,12,14-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 12-hydroxy-5,8,10,14-eicosatetraenoic acid,

isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 15-hydroxy-5,8,11,13-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof; 9-hydroxy-10,12-octadecadienoic acid and isomers thereof; 13-hydroxy-9,11-octadecadienoic acid and isomers thereof; 12(R)-hydroxy-5,8,14(Z,Z,Z)-eicosatrienoic acid and isomers thereof; 5(6)oxido- or 5,6-dihydroxy-8,11,14-eicosatrienoic acid, isomers thereof and 14,15-dihydro or 17,18-dehydro analogs thereof; 8(9)-oxido- or 8,9-dihydroxy-5,11,14-eicosatrienoic acid, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 11(12)-oxido- or 11,12-dihydroxy-5,8,14-eicosatrienoic acid, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof; 14(15)-oxido- or 14,15-dihydroxy-5,8,11-eicosatrienoic acid, isomers thereof and 5,6-dihydro or 17,18-dehydro analogs thereof.

25. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 8-hydroxy-5,9,11,14-eicosatetraenoic acid, isomers thereof and 5,6-dihydro or 14,15-dihydro or 17,18-dehydro analogs thereof.

26. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: 20,20,20-trifluoromethyl-LTB_4; 19-methyl-LTB_4, 19,19-dimethyl-LTB_4, 19-fluoro-LTB_4, 19,19-difluoro-LTB_4, 18,20-difluro-LTB_4, 20-fluoro-LTB_4; 3-thio-LTB_4, 3-hydroxy-LTB_4.

27. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of:

3-methyl-LTB_4, 3,3-dimethyl-LTB_4, 3-fluoro-LTB_4, 3,3-difluoro-LTB_4, 2,3-difluoro-LTB_4.

28. A method according to claim 1, wherein said LTB_4 agent is selected from the group consisting of: LTB_4 methylsulfonylamide, LTB_4 methylamide, 1-tetrazole LTB_4.

29. A method according to claim 1, wherein said LTB_4 agent is a salt thereof.

30. A method according to claim 1, wherein said LTB_4 agent is an ester derivative thereof.

31. A method according to claim 1, wherein said LTB_4 agent is an ether derivative thereof.

32. A method for the treatment of cancer in humans and animals comprising administering to a human or animal in need of such treatment, a pharmacologically acceptable, therapeutically effective amount of LTB_4 agent.

33. A method according to claim 32, wherein said agent is leukotriene B_4[5S,12R-dihydroxy-6,8,10,14(Z,E,E,Z)-eicosatetraenoic acid].

34. An anti-neoplastic pharmaceutical composition comprising a pharmacologically acceptable, therapeutically effective amount of an LTB_4 agent, in association with a pharmaceutically acceptable carrier.